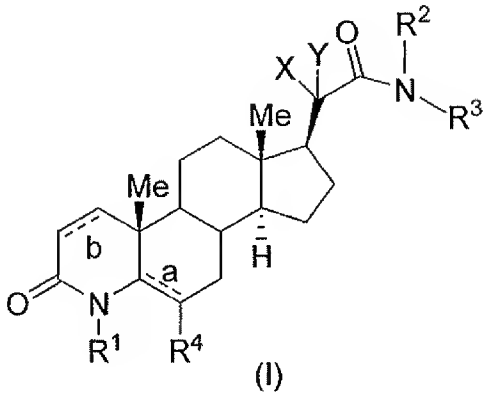
AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior listing of claims in the application.

1. (Currently amended) A compound of structural formula I:



(I)

a pharmaceutically acceptable salt or a stereoisomer thereof, wherein:

n is 0, 1, or 2;

a and b are each independently chosen from a double bond and a single bond;

X and Y are each independently chosen from hydrogen, halogen, hydroxy, C_{1-4} alkoxy, hydroxymethyl, and C_{1-3} alkyl, wherein said alkoxy and alkyl are each optionally substituted with one to seven fluorine atoms; or

X and Y, together with the carbon atom to which they are attached, can optionally form a C_{3-6} cycloalkyl group;

R^1 is chosen from carbonyl(C_{1-3} alkyl), hydroxy, C_{1-4} alkoxy, halogen, hydroxymethyl, (C_{0-6} alkyl)$_2$amino, and C_{1-3} alkyl, wherein said alkoxy and alkyl are each optionally substituted with one to seven fluorine atoms;

R^4 is chosen from halogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, $(CH_2)_n$-phenyl, and $(CH_2)_n$-naphthyl; and

wherein R^4 is optionally substituted with one or more substituents each independently chosen from cyano, carboxy, halogen, hydroxy, oxo, C_{1-4} alkoxy, and C_{1-4} alkylthio;

R^2 is hydrogen or C_{1-4} alkyl, wherein said C_{1-4} alkyl is optionally substituted with one or more substituents independently selected from halogen, hydroxy, C_{1-4} alkoxy, and C_{1-4} alkylamino;

R^3 is selected from

$(CH_2)_n$-heteroaryl, wherein said heteroaryl is optionally substituted with one or more substituents independently chosen from R^5;

wherein any methylene (CH_2) carbon atom in $(CH_2)_n$ is optionally substituted with one or more groups independently selected from halogen, hydroxy, and C_{1-4} alkyl optionally substituted with one or more halogen moieties; or two substituents when on the same methylene (CH_2) group are taken together with the carbon atom to which they are attached to form a cyclopropyl group;

R^5 is chosen from: hydrogen, halogen, (carbonyl)$_{0-1}C_{1-10}$ alkyl, (carbonyl)$_{0-1}C_{2-10}$ alkenyl, (carbonyl)$_{0-1}C_{2-10}$ alkynyl, C_{3-8} cycloalkyl C_{0-10} alkyl(carbonyl)$_{0-1}$, C_{3-8} heterocycloalkyl C_{0-10} alkyl(carbonyl)$_{0-1}$, heterocycloalkyl, C_{1-4}acylamino C_{0-10} alkyl, C_{0-10} alkylamino C_{0-10} alkyl, C_{0-10} alkylamino C_{0-10} alkylaminocarbonyl, di-(C_{1-10} alkyl)amino C_{0-10} alkyl, arylC_{0-10} alkylamino C_{0-10} alkyl, (arylC_{0-10} alkyl)$_2$amino C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl, C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl, (C_{3-8} cycloalkyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl, (C_{3-8} heterocyclyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonylamino, (C_{1-10} alkyl)$_2$aminocarbonylamino, (aryl C_{1-10} alkyl)$_{1-2}$aminocarbonylamino, C_{0-10} alkyl aminocarbonylamino, C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonylamino, (C_{1-10} alkyl)$_2$aminocarbonyl C_{0-10} alkyl, (aryl C_{1-10} alkyl)$_{1-2}$aminocarbonyl C_{0-10} alkyl, C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, aryl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, (C_{1-10} alkyl)$_2$aminocarbonyl, (aryl C_{1-10} alkyl)$_{1-2}$aminocarbonyl, C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl, C_{0-10} alkyl carbonylamino(C_{0-10} alkyl), C_{0-10} alkoxy carbonylamino(C_{0-10} alkyl), carboxy C_{0-10} alkylamino, carboxy C_{0-10} alkyl, carboxy C_{3-8} cycloalkyl, C_{1-10} alkoxy, C_{1-10}alkyloxy C_{0-10}alkyl, C_{1-10} alkylcarbonyloxy, C_{0-10}alkyl carbonylC_{0-10}alkoxy, C_{3-8} heterocyclyl C_{0-10} alkylcarbonyloxy, C_{3-8} cycloalkyl C_{0-10} alkylcarbonyloxy, aryl C_{0-10} alkylcarbonyloxy, C_{1-10} alkylcarbonyloxy amino, C_{3-8} heterocyclyl C_{0-10} alkylcarbonyloxy amino, C_{3-8} cycloalkyl C_{0-10} alkylcarbonyloxy amino, aryl C_{0-10} alkylcarbonyloxy amino, (C_{1-10} alkyl)$_2$aminocarbonyloxy, (aryl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy, (C_{3-8} heterocyclyl C_{0-10} alkyl)$_{1-2}$aminocarbonyloxy,

(C_{3-8} cycloalkyl C_{0-10}alkyl)$_{1-2}$aminocarbonyloxy, hydroxy (carbonyl)$_{0-1}C_{0-10}$alkyl, hydroxycarbonylC_{0-10}alkoxy, hydroxycarbonylC_{0-10}alkyloxy, C_{1-10} alkylthio, C_{1-10} alkylsulfinyl, aryl C_{0-10} alkylsulfinyl, C_{3-8} heterocyclyl C_{0-10} alkylsulfinyl, C_{3-8} cycloalkyl C_{0-10} alkylsulfinyl, C_{1-10} alkylsulfonyl, aryl C_{0-10} alkylsulfonyl, C_{3-8} heterocyclyl C_{0-10} alkylsulfonyl, C_{3-8} cycloalkyl C_{0-10} alkylsulfonyl, C_{1-10} alkylsulfonylamino, aryl C_{1-10} alkylsulfonylamino, C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino, C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino, cyano, nitro, perfluoroC_{1-6}alkyl, and perfluoroC_{1-6}alkoxy;

wherein R^5 is optionally substituted with one or more groups chosen from: OH, (C_{1-6})alkoxy, halogen, CO_2H, CN, $O(C=O)C_1$-C_6 alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, -$O_b(C_{1-10})$perfluoroalkyl, and NH_2; ~~and~~

~~R^6 is halogen, hydroxy, C_{1-4} alkoxy, $CONH_2$, and C_{1-4} alkylamino, wherein R^6 is optionally substituted with one or more groups chosen from: OH, (C_{1-6})alkoxy, halogen, CO_2H, CN, $O(C=O)C_1$-C_6 alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, $O_b(C_{1-10})$perfluoroalkyl, NH_2, and $O_b(C_{1-10})$alkyl optionally substituted with one or more halogen moieties.~~

2. – 4.(Cancelled)

5. (Currently amended) The compound of ~~Claim 2~~ Claim 1, wherein in R^3, said heteroaryl is chosen from azabenzimidazole, acridinyl, carbazolyl, cinnolinyl, benzimidazolyl, benzofuranyl, benzothiophenyl, benzoxazolyl, benzothiazolyl, benzodihydrofuranyl, 1,3-benzodioxolyl, 2,3-dihydro-1,4-benzodioxinyl, indolyl, quinolyl, quinoxalinyl, isoquinolyl, furanyl, thienyl, imidazolyl, oxazolyl, thiazolyl, isoxazolyl, isothiazolyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidyl, pyrazinyl, piridazinyl, tetrahydroquinolinyl, thiadiazolyl, oxadiazolyl, triazolyl, imidizopyridinyl, tetrazolyl, and indanyl; wherein said R^3 is optionally substituted with one or more substituents independently chosen from R^5.

6. (Original) The compound of Claim 5, wherein said heteroaryl is chosen from azabenzimidazole, benzimidazolyl, benzofuranyl, benzothiophenyl, benzoxazolyl, benzothiazolyl, benzodihydrofuranyl, 1,3-benzodioxolyl, 2,3-dihydro-1,4-benzodioxinyl, indolyl, quinolyl, quinoxalinyl, isoquinolyl, thienyl, imidazolyl, thiazolyl, isoxazolyl, isothiazolyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidyl, pyrazinyl, piridazinyl, tetrahydroquinolinyl, thiadiazolyl, triazolyl, imidizopyridinyl, and tetrazolyl; wherein said R^3 is optionally substituted with one or more substituents independently chosen from R^5.

7. (Previously amended) The compound of Claim 1, wherein R^1 is C_{1-3} alkyl optionally substituted with one to seven fluorine atoms.

8. (Previously amended) The compound of Claim 7, wherein R^1 is methyl.

9. (Original) The compound of Claim 1, wherein R^4 is chosen halogen, C_{1-6} alkyl, and $(CH_2)_n$-phenyl, wherein R^4 is optionally substituted with one or more substituents each independently chosen from cyano, carboxy, halogen, hydroxy, oxo, C_{1-4} alkoxy, and C_{1-4} alkylthio.

10. (Original) The compound of Claim 9, wherein R^4 is chosen from halogen and C_{1-6} alkyl, optionally substituted with one or more substituents each independently chosen from cyano, carboxy, halogen, hydroxy, oxo, C_{1-4} alkoxy, and C_{1-4} alkylthio.

11. (Original) The compound of Claim 10, wherein R^4 is CH_3.

12. – 13. (Cancelled)

14. (Original) The compound of Claim 1, wherein R^5 is chosen from: hydrogen, halogen, $(carbonyl)_{0-1}C_{1-10}$ alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl$(carbonyl)_{0-1}$, C_{3-8} heterocycloalkyl C_{0-10} alkyl$(carbonyl)_{0-1}$, C_{0-10} alkylamino C_{0-10} alkyl, C_{0-10} alkylamino C_{0-10} alkylaminocarbonyl, arylC_{0-10} alkylamino C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl, C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonylamino, C_{0-10} alkyl aminocarbonylamino, C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonylamino, C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, aryl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, $(C_{1-10}$ alkyl$)_2$aminocarbonyl,

C_{1-10} alkoxy $(carbonyl)_{0-1}C_{0-10}$ alkyl, C_{0-10} alkyl carbonylamino(C_{0-10} alkyl), C_{0-10} alkoxy carbonylamino(C_{0-10} alkyl), carboxy C_{0-10} alkylamino, carboxy C_{0-10} alkyl, carboxy C_{3-8} cycloalkyl, C_{1-10} alkoxy, hydroxy $(carbonyl)_{0-1}C_{0-10}$alkyl, C_{0-10}alkyl carbonylC_{0-10}alkoxy, hydroxycarbonylC_{0-10}alkoxy, hydroxycarbonylC_{0-10}alkyloxy, cyano, nitro, perfluoroC_{1-6}alkyl, and perfluoroC_{1-6}alkoxy; wherein R^5 is optionally substituted with one or more groups chosen from: OH,

(C_{1-6})alkoxy, halogen, CO_2H, CN, $O(C=O)C_1$-C_6 alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, -$O_b(C_{1-10})$perfluoroalkyl, and NH_2.

15. (Original) The compound of Claim 14, wherein R^2 is chosen from hydrogen and C_{1-4} alkyl, optionally substituted with one or more substituents independently selected from halogen, hydroxy, C_{1-4} alkoxy, and C_{1-4} alkylamino.

16. (Previously amended) A compound selected from:

N-[3-(trifluoromethyl)pyridin-2-yl] -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(5-cyanopyrid-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-[6-(trifluoromethyl)pyridin-2-yl] -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-[3-cyano-pyridin-2-yl] -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(3-methyl-benzimidazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(5-nitro-benzimidazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(1,3-benzothiazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(4-chloro-1,3-benzothiazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(6-methyl-1,3-benzothiazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(6-methoxy-1,3-benzothiazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(5,6-dimethyl-1,3-benzothiazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(4-methyl-1,3-benzothiazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(5-fluoropyridin-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(5-cyclopropyl-1,3,4-thiadiazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(2-methyl-3-bromo-pyrid-4-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N,N-methyl(pyridin-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(5-methylpyridin-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-[5-(trifluoromethyl)pyridin-2-yl] -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(5-chloropyridin-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(1,3-pyrimid-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(1,3-pyrazin-4-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(benzimidazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(2-methyl-pyrid-4-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;
N-(pyridin-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(pyridin-3-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(pyridin-4-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[(3-carboxamido)-pyridin-6-yl] -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(6-cyanopyridin-3-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(6-methylpyridin-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(6-aminopyridin-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[(6-trifluoromethyl)-pyrid-3-yl] -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(6-ethylpyridin-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(6-fluoro-1,3-benzothiazol-2-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(2-ethylpyridin-4-yl) -4-methyl-6-methyl-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(2-ethylpyridin-4-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(2-methyl-pyrid-4-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(pyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(pyridin-3-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(pyridin-4-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(6-cyanopyridin-3-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(6-methylpyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(6-aminopyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -[(6-trifluoromethyl)-pyrid-3-yl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(2-chloro-pyrid-4-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acctamide;

N -(5-fluoro-pyrid-3-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(6-ethylpyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(5-cyclopropyl-1,3,4-thiadiazol-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(2-methyl-3-bromo-pyrid-4-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N , *N* -methyl(pyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(5-methylpyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -[5-(trifluoromethyl)pyridin-2-yl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(5-chloropyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(1,3-pyrimid-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(1,3-pyrazin-4-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -(5-fluoropyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamidc;

N -(benzimidazol-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -[(5-carboxyl)-pyrid-2-yl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N -[(4-carboxyl)phenyl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[(4-carboxyl-3-chloro)phenyl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[2-chloro(4-methoxycarbonyl)phenyl]-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(1,3-pyrimid-4-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[5-(ethoxycarbonyl) -1,3-thiazol-2-yl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[4-(trifluoromethyl)-5-(ethoxycarbonyl) -1,3-thiazol-2-yl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[4-hydroxy-5-(ethoxycarbonyl) -1,3-pyrimid-2-yl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(6-methylpyridin-2-yl)-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[(4-carboxamido)phenyl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(2-methyl-pyrid-4-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(pyridin-3-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(4,6-dimethylpyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(benzimidazol-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(6-methylpyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(6-cyanopyridin-3-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(5-fluoropyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-(5-chloropyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[5-(trifluoromethyl)pyridin-2-yl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[(5-carboxyl)-pyrid-2-yl] -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

N-[(5-cyclopropyl-1,3,4-thiadiazol-2-yl] - 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-[4,6-dimethyl-pyridin-2-yl] 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-(benzimidazol-2-yl) - 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-[5-cyano-pyridin-2-yl] 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-(1,3-pyrimid-4-yl) - 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-[3-methyl-pyridin-2-yl] 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-[(5-carboxamido)pyrid2-l] -- 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-(isoquinolin-3-yl) - 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-[6-(trifluoromethyl)pyridin-2-yl]- 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-(4-azabenzimidazol-2-yl) - 6,6-ethylene-3-oxo-4-aza-5α-androst-17β-acetamide;

N-(1H-imidazo[4,5-b] pyridin-2-yl) -4-methyl-6-chloro-3-oxo-4-aza-5α-androst-5-en-17β-acetamide;

or a pharmaceutically acceptable salt thereof.

17. – 18.(Cancelled)

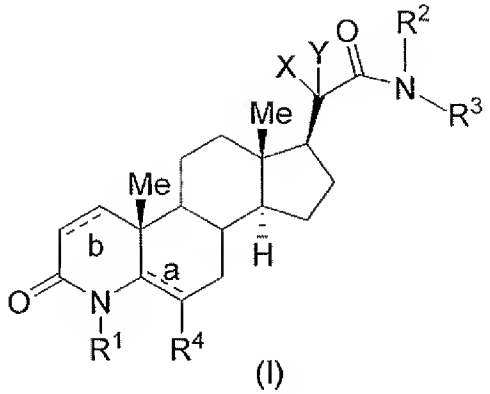
19. (Previously amended) A pharmaceutical composition comprising a compound of any one of Claims 1 or a salt or stereoisomer thereof and a pharmaceutically acceptable carrier.

20. (Previously amended) A composition of Claim 19, further comprising an active ingredient selected from: an estrogen or an estrogen derivative, alone or in combination with a progestin or progestin derivative, a bisphosphonate, an antiestrogen or a selective estrogen receptor modulator, an $\alpha v\beta 3$ integrin receptor antagonist, a cathepsin K inhibitor, an HMG-CoA reductase inhibitor, an osteoclast vacuolar ATPase inhibitor, an antagonist of VEGF binding to osteoclast receptors, an activator of peroxisome proliferator-activated receptor γ, calcitonin, a calcium receptor antagonist, parathyroid hormone or analog thereof, a growth hormone secretagogue, human growth hormone, insulin-like growth factor, a p38 protein kinase inhibitor, bone morphogenetic protein, an inhibitor of BMP antagonism, a prostaglandin derivative, vitamin D or vitamin D derivative, vitamin K or vitamin K derivative, ipriflavone, fluoride salts, dietary calcium supplements, and osteoprotegerin.

21. (Previously amended) A composition of Claim 20 wherein said bisphosphonate is alendronate.

22. to 31. (Cancelled)

32. (New) A compound of structural formula I:



(I)

a pharmaceutically acceptable salt or a stereoisomer thereof, wherein:

n is 0, 1, or 2;

a and b are each independently chosen from a double bond and a single bond;

X and Y are each independently chosen from hydrogen, halogen, hydroxy, C_{1-4} alkoxy, hydroxymethyl, and C_{1-3} alkyl, wherein said alkoxy and alkyl are each optionally substituted with one to seven fluorine atoms; or

X and Y, together with the carbon atom to which they are attached, can optionally form a C_{3-6} cycloalkyl group;

R^1 is chosen from carbonyl(C_{1-3} alkyl), hydroxy, C_{1-4} alkoxy, halogen, hydroxymethyl, (C_{0-6} alkyl)$_2$amino, and C_{1-3} alkyl, wherein said alkoxy and alkyl are each optionally substituted with one to seven fluorine atoms;

R^4 is chosen from halogen, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, $(CH_2)_n$-phenyl, and $(CH_2)_n$-naphthyl; and

wherein R^4 is substituted with one or more substituents each independently chosen from cyano, carboxy, halogen, hydroxy, oxo, C_{1-4} alkoxy, and C_{1-4} alkylthio;

R^2 is hydrogen or C_{1-4} alkyl, wherein said C_{1-4} alkyl is substituted with one or more substituents independently selected from halogen, hydroxy, C_{1-4} alkoxy, and C_{1-4} alkylamino;

R^3 is selected from

$(CH_2)_n$-heteroaryl, wherein said heteroaryl is optionally substituted with one or more substituents independently chosen from R^5;

wherein any methylene (CH_2) carbon atom in $(CH_2)_n$ is optionally substituted with one or more groups independently selected from halogen, hydroxy, and C_{1-4} alkyl optionally substituted with one or more halogen moieties; or two substituents when on the same methylene (CH_2) group are taken together with the carbon atom to which they are attached to form a cyclopropyl group;

R^5 is chosen from: hydrogen, halogen, (carbonyl)$_{0-1}$$C_{1-10}$ alkyl, (carbonyl)$_{0-1}$$C_{2-10}$ alkenyl, (carbonyl)$_{0-1}$$C_{2-10}$ alkynyl, C_{3-8} cycloalkyl C_{0-10} alkyl(carbonyl)$_{0-1}$, C_{3-8} heterocycloalkyl C_{0-10} alkyl(carbonyl)$_{0-1}$, heterocycloalkyl, C_{1-4}acylamino C_{0-10} alkyl, C_{0-10} alkylamino C_{0-10} alkyl, C_{0-10} alkylamino C_{0-10} alkylaminocarbonyl, di-(C_{1-10} alkyl)amino C_{0-10} alkyl, arylC_{0-10} alkylamino C_{0-10} alkyl, (arylC_{0-10} alkyl)$_2$amino C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10} alkyl, C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl, (C_{3-8} cycloalkyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl, (C_{3-8} heterocyclyl C_{0-10} alkyl)$_2$amino C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonylamino, (C_{1-10} alkyl)$_2$aminocarbonylamino, (aryl C_{1-10} alkyl)$_{1-2}$aminocarbonylamino,

C_{0-10} alkyl aminocarbonylamino, C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonylamino, $(C_{1-10}$ alkyl$)_2$aminocarbonyl C_{0-10} alkyl, (aryl C_{1-10} alkyl$)_{1-2}$aminocarbonyl C_{0-10} alkyl, C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl,
aryl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, $(C_{1-10}$ alkyl$)_2$aminocarbonyl,
(aryl C_{1-10} alkyl$)_{1-2}$aminocarbonyl, C_{1-10} alkoxy (carbonyl$)_{0-1}C_{0-10}$ alkyl,
C_{0-10} alkyl carbonylamino(C_{0-10} alkyl), C_{0-10} alkoxy carbonylamino(C_{0-10} alkyl),
carboxy C_{0-10} alkylamino, carboxy C_{0-10} alkyl, carboxy C_{3-8} cycloalkyl, C_{1-10} alkoxy,
C_{1-10}alkyloxy C_{0-10}alkyl, C_{1-10} alkylcarbonyloxy, C_{0-10}alkyl carbonylC_{0-10}alkoxy,
C_{3-8} heterocyclyl C_{0-10} alkylcarbonyloxy, C_{3-8} cycloalkyl C_{0-10} alkylcarbonyloxy,
aryl C_{0-10} alkylcarbonyloxy, C_{1-10} alkylcarbonyloxy amino,
C_{3-8} heterocyclyl C_{0-10} alkylcarbonyloxy amino,
C_{3-8} cycloalkyl C_{0-10} alkylcarbonyloxy amino, aryl C_{0-10} alkylcarbonyloxy amino,
$(C_{1-10}$ alkyl$)_2$aminocarbonyloxy, (aryl C_{0-10} alkyl$)_{1-2}$aminocarbonyloxy,
(C_{3-8} heterocyclyl C_{0-10} alkyl$)_{1-2}$aminocarbonyloxy,
(C_{3-8} cycloalkyl C_{0-10}alkyl$)_{1-2}$aminocarbonyloxy, hydroxy (carbonyl$)_{0-1}C_{0-10}$alkyl,
hydroxycarbonylC_{0-10}alkoxy, hydroxycarbonylC_{0-10}alkyloxy, C_{1-10} alkylthio,
C_{1-10} alkylsulfinyl, aryl C_{0-10} alkylsulfinyl, C_{3-8} heterocyclyl C_{0-10} alkylsulfinyl,
C_{3-8} cycloalkyl C_{0-10} alkylsulfinyl, C_{1-10} alkylsulfonyl, aryl C_{0-10} alkylsulfonyl,
C_{3-8} heterocyclyl C_{0-10} alkylsulfonyl, C_{3-8} cycloalkyl C_{0-10} alkylsulfonyl,
C_{1-10} alkylsulfonylamino, aryl C_{1-10} alkylsulfonylamino,
C_{3-8} heterocyclyl C_{1-10} alkylsulfonylamino, C_{3-8} cycloalkyl C_{1-10} alkylsulfonylamino,
cyano, nitro, perfluoroC_{1-6}alkyl, and perfluoroC_{1-6}alkoxy;

wherein R^5 is optionally substituted with one or more groups chosen from: OH, (C_{1-6})alkoxy, halogen, CO_2H, CN, $O(C{=}O)C_1$-C_6 alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, -$O_b(C_{1-10})$perfluoroalkyl, and NH_2; and

R^6 is halogen, hydroxy, C_{1-4} alkoxy, $CONH_2$, and C_{1-4} alkylamino, wherein R^6 is optionally substituted with one or more groups chosen from: OH, (C_{1-6})alkoxy, halogen, CO_2H, CN, $O(C{=}O)C_1$-C_6 alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, -$O_b(C_{1-10})$perfluoroalkyl, NH_2, and -$O_b(C_{1-10})$alkyl optionally substituted with one or more halogen moieties.

33. (New) The compound of Claim 32, wherein in R^3, said heteroaryl is chosen from azabenzimidazole, acridinyl, carbazolyl, cinnolinyl, benzimidazolyl, benzofuranyl,

benzothiophenyl, benzoxazolyl, benzothiazolyl, benzodihydrofuranyl, 1,3-benzodioxolyl, 2,3-dihydro-1,4-benzodioxinyl, indolyl, quinolyl, quinoxalinyl, isoquinolyl, furanyl, thienyl, imidazolyl, oxazolyl, thiazolyl, isoxazolyl, isothiazolyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidyl, pyrazinyl, piridazinyl, tetrahydroquinolinyl, thiadiazolyl, oxadiazolyl, triazolyl, imidizopyridinyl, tetrazolyl, and indanyl; wherein said R^3 is optionally substituted with one or more substituents independently chosen from R^5.

34. (New) The compound of Claim 33, wherein said heteroaryl is chosen from azabenzimidazole, benzimidazolyl, benzofuranyl, benzothiophenyl, benzoxazolyl, benzothiazolyl, benzodihydrofuranyl, 1,3-benzodioxolyl, 2,3-dihydro-1,4-benzodioxinyl, indolyl, quinolyl, quinoxalinyl, isoquinolyl, thienyl, imidazolyl, thiazolyl, isoxazolyl, isothiazolyl, pyrazolyl, pyrrolyl, pyridyl, pyrimidyl, pyrazinyl, piridazinyl, tetrahydroquinolinyl, thiadiazolyl, triazolyl, imidizopyridinyl, and tetrazolyl; wherein said R^3 is optionally substituted with one or more substituents independently chosen from R^5.

35. (New) The compound of Claim 32, wherein R^1 is C_{1-3} alkyl optionally substituted with one to seven fluorine atoms.

36. (New) The compound of Claim 35, wherein R^1 is methyl.

37. (New) The compound of Claim 32, wherein R^4 is chosen halogen, C_{1-6} alkyl, and $(CH_2)_n$-phenyl, wherein C_{1-6} alkyl, and $(CH_2)_n$-phenyl is optionally substituted with one or more substituents each independently chosen from cyano, carboxy, halogen, hydroxy, oxo, C_{1-4} alkoxy, and C_{1-4} alkylthio.

38. (New) The compound of Claim 37, wherein R^4 is chosen from halogen and C_{1-6} alkyl, substituted with one or more substituents each independently chosen from cyano, carboxy, halogen, hydroxy, oxo, C_{1-4} alkoxy, and C_{1-4} alkylthio.

39. (New) The compound of Claim 32, wherein R^5 is chosen from: hydrogen, halogen, $(carbonyl)_{0-1}C_{1-10}$ alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl$(carbonyl)_{0-1}$, C_{3-8} heterocycloalkyl C_{0-10} alkyl$(carbonyl)_{0-1}$, C_{0-10} alkylamino C_{0-10} alkyl, C_{0-10} alkylamino C_{0-10} alkylaminocarbonyl, arylC_{0-10} alkylamino C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkylamino C_{0-10}

alkyl, C_{3-8} heterocyclyl C_{0-10} alkylamino C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonylamino, C_{0-10} alkyl aminocarbonylamino, C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonylamino, C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, C_{3-8} cycloalkyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, C_{3-8} heterocyclyl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, aryl C_{0-10} alkyl aminocarbonyl C_{0-10} alkyl, $(C_{1-10}$ alkyl$)_2$aminocarbonyl,

C_{1-10} alkoxy (carbonyl)$_{0-1}C_{0-10}$ alkyl, C_{0-10} alkyl carbonylamino(C_{0-10} alkyl), C_{0-10} alkoxy carbonylamino(C_{0-10} alkyl), carboxy C_{0-10} alkylamino, carboxy C_{0-10} alkyl, carboxy C_{3-8} cycloalkyl, C_{1-10} alkoxy, hydroxy (carbonyl)$_{0-1}C_{0-10}$alkyl, C_{0-10}alkyl carbonylC_{0-10}alkoxy, hydroxycarbonylC_{0-10}alkoxy, hydroxycarbonylC_{0-10}alkyloxy, cyano, nitro, perfluoroC_{1-6}alkyl, and perfluoroC_{1-6}alkoxy; wherein R^5 is optionally substituted with one or more groups chosen from: OH, (C_1-6)alkoxy, halogen, CO_2H, CN, O(C=O)C_1-C_6 alkyl, NO_2, trifluoromethoxy, trifluoroethoxy, -$O_b(C_{1-10})$perfluoroalkyl, and NH_2.

40. (New) The compound of Claim 39, wherein R^2 is chosen from hydrogen and C_{1-4} alkyl, optionally substituted with one or more substituents independently selected from halogen, hydroxy, C_{1-4} alkoxy, and C_{1-4} alkylamino.